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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 05012006

Application Number: 09/766,652
Filing Date: January 23, 2001
Appellant(s): FERGUSON, ET AL.

James A. LaBarre
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 21 February 2006.

EXAMINER'S ANSWER

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments and final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of invention contained in the brief is agreed with.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 4, 6, and 9-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,345,239 issued to Bowman-Amuah in view of "Oracle Intelligent Agent User's Guide", Oracle Corporation, Release 8.1.7, PN A85251-01, September 2000.

In order to clarify the examiners rejection reasoning, a background interpretation of the claimed subject matter will first be presented.

Appellants are disclosing a data model that interacts with intelligent agents by initiating a list of agent tasks and agent commands. The recited definition of the claimed "data model" is to "support the automated provisioning of servers and other devices that support various types of services" on the internet (Specification: para:0010) by providing "relationships between the various network elements including software, configuration, monitoring, hardware, and (queues) entities. Simply put, the invention is directed to a data model which provisions (configures) network (server) elements using intelligent agents. The claimed elements include agent queues entities, and agent queues commands (and output) entities, which represent the tasks and commands (output) to be performed by the intelligent agents. A "queue", as known in the art, is simply a multi-element data structure from which elements can be removed

in the same order which they were inserted (Microsoft Computer Dictionary, 1997). An "entity", in this case, is somewhat ambiguous since the specification indicates that an entity can be a configuration entity, hardware or software entity, service entity, network entity (Specification, para:0054-0055), or even schools systems, government agencies, or organized groups (para:0002). However, the specification does indicate that the claimed "agent queues entities", for example, are simply a list of ***tasks*** *to be performed by the* ***intelligent agents*** *on network elements. (para:0328) Accordingly, the examiner has interpreted the claimed "entities" as network elements subject to the "automated provisioning" provided by the claimed "data model". Similarly, the claimed "agent command entities" are disclosed as simply being the commands to be executed by the intelligent agents (Specification: para:0337). Hence, the examiner has interpreted the "agent command entities" as simply intelligent agent commands.*

Against this backdrop, the examiner has rejected independent claims 1, 4, 6 and 9-11 as rendered obvious in view of the teachings of Bowman-Amuah and Oracle. Specifically, the teachings of Bowman-Amuah include various "models" for network provisioning (CL65-L65-67, CL9-L61-63, Figs. 21-28 especially, Fig. 28) based on network elements and business requirements including a teaching of the relationships between the various network elements (Fig. 28, CL92-L40-43, CL99-L36-46). However, Bowman-Amuah does not teach the use of intelligent agents. Oracle teaches the use of intelligent agents. While intelligent agents are well-known in the art, and commonly commanded to perform tasks that include autonomously searching a network (internet) for information (See: Microsoft Computer Dictionary, "agent" (2),

1997), the intelligent agents disclosed by Oracle include features such as "auto-discovery" (2-12, 2-14) for automatically generating files containing information about services to be managed, and "data gatherer" for collecting network performance data (2-17). These features are in addition to the standard scripting language for issuing intelligent agent commands in the performance of network tasks (3-2). That is, Oracle discloses the elements necessary for implementing the functionality of the claimed ***agent queues*** *and* ***agent command entities*** *by using the necessary* ***commands*** *and* ***tasks*** *executed by* ***intelligent agents*** *in acquiring network provisioning information. The basis for the rejection as set forth by the examiner is that the claimed "data model", which provisions network (server) elements using intelligent agents that have been commanded to perform network tasks, is rendered obvious by the combination of the teachings of Bowman-Amuah and Oracle. The examiner therefore maintains that appellants have simply claimed a "model" that consists of the necessary commands and tasks to be performed by intelligent agents in provisioning network devices.*

Regarding independent claims 1, 4, and 6: Bowman-Amuah discloses network "models" for network provisioning (CL65-L65-67, CL69-L23-27, 55-60, CL71-L15-59, CL9-L61-64, Figs. 21-28 especially, Fig. 28) based on network elements and business requirements including a teaching of the relationships between the various network elements (Fig. 28, CL92-L40-43, CL99-L36-46)

For example, Bowman-Amuah discloses certain elements of the limitations of the claimed invention as follows:

- Queue data model for intelligent agents performing network tasks from command list: Bowman-Amuah discloses a network data model relating network data objects as entities. (e.g. "entities" are network elements for provisioning, provisioning CL65-L65-67, CL69-L23-27, 55-60, CL71-L15-59, CL9-L61-64, Figs. 21-28 especially, Fig. 28)

- queue entities representing list of tasks to be preformed by agents: Bowman-Amuah discloses a network (listed) network tasks. (e.g. "entities" are network elements for provisioning, "tasks" are network provisioning tasks, CL65-L65-67, CL69-L23-27, 55-60, CL71-L15-59, CL9-L61-64, Figs. 21-28 especially, Fig. 28)

- queue commands relating queues entities with agent commands/outputs: Bowman-Amuah discloses a network commands (requirements) and outputs. (e.g. the relationships between various software, configuration, monitoring, hardware, and network elements. (CL71-L15-59, CL92-L40-44, CL99-L36-41, Figs. 27, 28, 29)

- command output entities representing agent output commands: Bowman-Amuah discloses a network command requirements and outputs. (i.e. "commands" for network configuration, CL82-L9-47, CL83-L21-45, Figs. 47-49)

Bowman-Amuah therefor renders obvious the elements relating to the claimed "data model" which provisions network elements.

*Bowman-Amuah **does not** explicitly teach the use of intelligent agents executing commands for performing network tasks.*

Oracle discloses intelligent agents for performing network tasks. The use of Intelligent agents is well-known to one skilled in the art as an autonomous process running in the network for providing supporting database service and commonly

commanded to perform tasks. These tasks include autonomously searching a network (internet) for information (See: Microsoft Computer Dictionary, "agent" (2), 1997). The intelligent agents disclosed by Oracle include features such as "auto-discovery" (2-12, 2-14) for automatically generating files containing information about services to be managed, and "data gatherer" for collecting network performance data (2-17), in addition to the standard scripting language for issuing intelligent agent commands in the performance of network tasks (3-2). That is, Oracle discloses the elements necessary for implementing the functionality of the claimed agent queues and agent command entities by using the necessary commands and tasks executed by intelligent agents in acquiring network provisioning information. In fact, the auto-discovery feature appears to perform such network provisioning tasks automatically. (2-12, 2-14)

For example, Oracle discloses the elements of the limitations of the claimed invention as follows:

- command entities representing commands to be executed by agents: Oracle discloses the use of intelligent agents in executing commanded network tasks. (Chapters 1: 1-2 to 1-5, 2: 2-2 to 2-23, 3: 3-2 to 3-14)

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings Bowman-Amuah relating to a network data model relating network objects and entities, with the teachings of Oracle relating to the use of intelligent agents for performing network tasks, to realize the claimed invention. An obvious motivation exists since, as referenced in the prior art, the use intelligent agents provides a more efficient method of network control and analysis

since agents exhibit independent intelligence, mobility and can operate autonomy and varying degrees of commanded constraints. (see Bigus, Background, for example) Hence, as skilled artisan tasked with developing a data model for interacting with intelligent agents in the provisioning network devices, and having access to the teachings of Bowman-Amuah and Oracle, would have knowingly modified the teachings of Bowman-Amuah with the teachings of Oracle (or visa versa) to realize the features of the claimed invention.

Per dependent claims 9-11: This group of claims includes limitations relating to queuing, busy signals, tasks, and one-to-many / many-to-one relationships which are control features of the Oracle intelligent agents (see: Chapter 3).

(10) Response to Argument

The main thrust of applicant's arguments focus on arguing that the prior art does not teach a "data model" comprised of the combination of entities recited in the claim, and that the examiner has alleged that the primary reference (Bowman-Amuah) teaches most of the elements of the claim. In response, the examiner first notes that rejection has asserted that only certain elements of the claimed limitations are disclosed by Bowman-Amuah. Not that the single reference teaches most or all of the elements of a single limitation as alleged by appellants. In fact, the final rejection clearly sets forth that Boman-Amuah ***does not*** *explicitly teach the claimed elements relating to the use of intelligent agents at all. (See Final Action page 7, line 4) For example, consider the rejection of the limitation relating to "queue entities representing list of tasks to be*

preformed by agents". As defined in appellants' specification, "agent queues entities" are a list of ***tasks*** *to be performed by the* ***intelligent agents*** *on* ***network elements****. (para:0328) Here, the Bowman-Amuah reference is relied on as a teaching of a model for provisioning network elements, while Oracle is relied upon for a teaching of intelligent agents. As noted above, appellant's invention is drawn to a data model for provisioning network elements using intelligent agents. That is, each claim limitation requires elements relating to both network provisioning and intelligent agents. Hence the examiner's rejection has clearly set forth that the claimed subject matter is rendered obvious by the combination of Bowman-Amuah and Oracle. Appellants appear to have conveniently ignored the teachings of the secondary reference (Oracle) and have instead focused their arguments exclusively on what is allegedly not disclosed in the Bowman-Amuah primary reference. This clearly amounts to piecemeal analysis and is a misrepresentation of the examiner's rejection.*

Regarding appellants allegations that the prior art does not teach the "data model" of the claimed invention, the examiner again turns to appellant's specification for guidance in interpretation of the claimed "data model". The specification reveals the following passages:

> *"In accordance with the present invention, the foregoing objectives are achieved by way of a data model to support the automated provisioning of servers and other devices that support various types of services such as the hosting of an Internet or intranet website. Such a data model should exhibit sufficient flexibility to accommodate the differing needs of the providers of such services, while maintaining repeatability, and hence reliability, in the provisioning process. This data model provides relationships between various software, configuration, monitoring, hardware, network, domain name server (DNS), and queues entities." (Specification, para:0010)*

Based on this seemingly broad definition of the recited "data model", the examiner submits that Bowman-Amuah renders obvious the defined elements of network provisioning of servers and other devices that support various types of services and accommodates the needs of providers of such services (CL65-L65-67, CL69-L23-27, 55-60, CL71-L15-59, CL9-L61-64, Figs. 21-28 especially, Fig. 28) and provides relationships between various network elements (Fig. 28, CL92-L40-43, CL99-L36-46).

MPEP 2106 recites the following supporting rationale for this interpretation:

> "While it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not impose that limitation. A broad interpretation of a claim by Office personnel will reduce the possibility that the claim, when issued, will be interpreted more broadly than is justified or intended. An applicant can always amend a claim during prosecution to better reflect the intended scope of the claim."

It is also noted that a "model", as defined in the Microsoft Computer Dictionary, is simply the "use of a computer to describe the behavior of a system" (See: model/modeling (1)). Bowman-Amuah also clearly meets the requirements of this definition as noted above.

The examiner has also considered the invention as a whole as required by MPEP 2141.02, and has considered the claims in light of the specification as required by MPEP 2111. However, as noted above, looking into the specification for any guidance in further defining the claimed limitations only serves to broaden ones interpretation of the claimed limitations.

Appellants further argue that the claimed "entities" are components of the data model which contain information relating to the command queues and, by example, indicate that the claimed "agent queues entities" represent a list of tasks to be

performed by the intelligent agents. The examiner again submits that, this definition is rendered obvious by the Bowman-Amuah teachings of a model provisioning network elements, and the Oracle teaching of intelligent agents performing tasks, which forms the basis for the examiners rejection as noted above.

In summary, the examiner has not simply based the rejection on certain corresponding "terms" recited in the prior art as alleged by appellants, but instead has formed a basis for rejection in light of the inventive concept of the claimed invention using the specific definitions of claim terms provided in appellant's specification as guidance. In contrast, appellants appear to argue that specific terms from the claim language, such as "agent queues entities" for example, are not disclosed in the prior art of record. MPEP 2106 recites the following:

> *Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (**meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings**."). **Any special meaning assigned to a term "must be sufficiently clear in the specification** that any departure from common usage would be so understood by a person of experience in the field of the invention." Multiform Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01.*

*The examiner therefore maintains that each element of the **claimed limitations** of the present invention, when considered in view of the specifications' definition of the recited claim terminology, is clearly rendered obvious by the combination of Bowman-Amuah and Oracle. Accordingly, the examiner has maintained the 103(a) rejection.*

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons it is believed that the rejections should be sustained.

Respectfully submitted,
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